

WILDLIFE MANAGEMENT UNIT 8B - NORTH SLOPE, DAGGETT

Boundary Description

Daggett and Summit Counties - Boundary begins at the Utah-Wyoming state line and the Burn Fork-Birch Creek drainage divide; then east along this state line to the Utah-Wyoming-Colorado state lines (Three corners); south along the Utah-Colorado state line to the Green River; west along the Green River to Flaming Gorge Reservoir; west along the south shore of Flaming Gorge Reservoir to Cart Creek; south along Cart creek to Highway SR-191; south on SR-191 to the Uintah-Daggett County line (summit of the Uinta Mountains); west along this summit to the Burnt Fork-Sheep Creek drainage divide; north along this drainage divide to the Burnt Fork-Birch Creek drainage divide; north along this drainage divide to the Utah-Wyoming state line and beginning point.

Management Unit Description

The majority of the deer and elk winter range in unit 8 (8A & 8B) is on U.S. Forest Service and BLM managed lands. Privately owned lands comprise about 19% of the winter range, most notably the bottomland in the Lucerne Valley around Manila, Brown's Park, and Clay Basin. Elsewhere, privately owned land is used as rangeland for cattle or for summer homes. Manila and Dutch John are the only towns in sub-unit 8B. BLM lands are used primarily for cattle grazing, with oil and gas operations being the major activities in Clay Basin. Winter range on Forest Service land is mainly part of the Flaming Gorge National Recreation Area. Following construction of the Flaming Gorge dam, approximately 14,000 acres of deer winter range was flooded, but the reservoir does not appear to be a serious barrier to migration (Warren 1973). Concurrently, most livestock grazing was eliminated within the Green River corridor. The area is now managed for recreation and electrical power generation associated with the reservoir.

Because the majority of the land within this herd unit is public, this unit did not rank high on the winter range acquisition list. However, a property boundary survey of DWR land, which included Red Creek and Goslin Mountain, was ranked the top enhancement project in 1990.

Key Areas

Several important normal winter concentration areas were identified in the 1974 range inventory. They are: Dowd, Bear, and Goslin Mountains; Dutch John Flat, Little Hole, Red Creek Flat, Taylor Flat, Death Valley, and Digger Basin (Olson 1975). Even with very generous estimates, these areas provide only about 20% of the winter range, all of which is under federal management. The DWR owns some critical lands in Brown's Park (Taylor Flat and Red Creek) and on Goslin Mountain.

Grazing Summary

Local BLM and Forest Service personnel have provided information on past and current livestock grazing programs. With heavy season-long grazing on the Forest in the first half of the 1900's, cattle grazing since then has been reduced and adjusted downward, in particular since construction of Flaming Gorge Reservoir. There is little cattle use permitted in the Flaming Gorge Recreation Area. As of 2000, grazing takes place primarily along the southern boundary between the herd unit and Ashley National Forest. Cattle are in the Greendale area in summer, but stocking was light at 13.4 suitable acres/AUM. Eighty-five cows graze the allotment on a deferred rotation from June 1 to September 30. The Death Valley area in the Sheep Creek Mountain allotment is also lightly stocked at 15.4 suitable acres/AUM. It was permitted for 173 cows with calves from June 1 to September 15 on a deferred rotation schedule.

The sampled BLM grazing allotments are generally grazed by cattle in spring and/or summer. Antelope Flat is

part of the Goslin Mountain allotment, which is part of a deferred rotation system that is grazed either spring or fall. The higher country on Goslin Mountain, where DWR owns isolated parcels, is grazed from mid-July to early or mid-September on a deferred rotation basis for 400 AUM's.

Unit Management Objectives

The management plan for Unit 8 (8A & 8B) as of 2001, includes a target herd size of 5,300 wintering deer with a composition of 15 bucks to 100 does. Thirty percent of the bucks are to be 2-point or better. The 2001 elk management objective is to achieve a target winter herd size of 2,100 (1,600 in Summit and West Daggett; 500 in the Three Corners) with a minimum post season bull to cow ratio of 8:100. At least 4 of these bulls will be 2½ years of age or older (DeBloois et. al 2001).

Study Site Description

Trend studies were originally established at Cedar Springs (8B-1), Goslin Mountain (8B-2), Bear Top Mountain (8B-3), Greendale (8B-4) and Bennett Ranch (8B-5) in 1982. These sites were reread in 1988 along with 2 new trend studies which were established on BLM land at Antelope Flat (8B-7) and on Forest land at Phil Pico Mountain (8B-8). All of these sites were reread in 1995. Due to heavy livestock use on riparian areas on State land in the Goslin Mountain area, five new trend studies were established in 1995. Most of this heavy use was brought on by drought and poor distribution of livestock. Two studies sample mountain big sagebrush-grass range (West Goslin 8B-9 and Sagebrush Ridge 8B-10) and 3 sites monitor meadows which receive concentrated livestock and elk use (Triangle Meadow 8B-11, Big Meadow 8B-12, and Lower Big Meadow 8B-13). In 2000, all sites were reread, except for Cedar Springs which was suspended due to a poor condition and one new site was added at Clay Basin Bench (8B-14). With the exception of Cedar Springs (8B-1), Sagebrush Ridge (8B-10), Triangle Meadow (8B-11), Big Meadow (8B-12), and Lower Big Meadow (8B-13), all 8B sites were reread in 2005. Sagebrush Ridge (8B-10) was not read due to its close proximity to Goslin Mountain (8B-2) and will likely be reread in 2010. Triangle Meadow (8B-11), Big Meadow (8B-12), and Lower Big Meadow (8B-13) all showed little change, so will possibly be reread in 2010 on a 10 year rotation.

SUMMARY

WILDLIFE MANAGEMENT UNIT - 8B - NORTH SLOPE, DAGGETT

A total of 9 study sites were read on unit 8B in 2005. Of these, five were rereads of sites established in 1982, two were rereads of studies established in 1988, one was a reread of a site established in the Goslin Mountain area in 1995, and one was a study established in 2000 in Clay Basin. One site, Cedar Springs (8B-1) was suspended in 2000 and four more (8B-10, 8B-11, 8B-12 and 8B-13) were not read in 2005. Cedar Springs is totally dominated by pinyon and juniper leaving little browse in the understory. It is no longer considered representative of big game winter range. Sagebrush Ridge (8B-10) is very similar in vegetation to Goslin Mountain (8B-2) and is very close in proximity. This site will likely be reread in 2010. The other sites (8B-11, 8B-12, and 8B-13) showed little change in 2000 from the 1995 reading, therefore these sites will be read only on ten year intervals. Of the 9 study sites sampled, 3 were Wyoming big sagebrush, 2 were mountain brush, and 4 were mountain big sagebrush dominated sites.

Of the 9 trend studies in the 2005 trend assessments, 3 sites had stable soil trends, 1 had improving trends and 5 trend studies (Greendale, Antelope Flat, Phil Pico Mtn, West Goslin, and Clay Basin Bench) had declining trends. Of the 9 trend studies, 1 had improving browse trends, 3 were stable, and 5 had declining trends due to drought conditions and/or fire (Goslin Mtn, Bear Top Mtn, Antelope Flat, West Goslin, and Clay Basin Bench). Clay Basin Bench showed a large-scale sagebrush die-off between the 2000 and 2005 readings. Of all the sites within this unit, the Clay Basin Bench site occurs at the lowest elevation (driest site), which may explain these high losses. Herbaceous trends were stable on 4 sites, were upward on 2 sites, and were down on 3 sites (Bear Top Mountain, Phil Pico Mountain, and West Goslin).

The key browse species are principally Wyoming big sagebrush and mountain big sagebrush for this herd unit, both of which are of primary importance during the critical winter months. The exception would be mountain browse sites where the primary browse source is usually true mountain mahogany. However, there is still a significant component of sagebrush within these communities. Areas where sagebrush is the key species have shown continuing increases in decadence and loss of plants. Their respective perennial forb understories have shown similar downward trends in the last 10 years. Wyoming big sagebrush communities, with their lower site potentials, seem to be declining more severely than the mountain big sagebrush communities, which have inherently higher site potentials. The following series of values are averages listed in order of year sampled (1995, 2000, and 2005). These values help illustrate best the differences between the two species of sagebrush. These averages are as follows:

- percent decadence.. 20%, 30%, and 25% for mountain big sagebrush
- percent decadence.. 15%, 39%, and 52% for Wyoming big sagebrush
- percent dying..... 9%, 12%, and 16% for mountain big sagebrush
- percent dying..... 5%, 17%, and 43% for Wyoming big sagebrush
- population changes 2,505, 2,655, and 2,190 plants/acre for mountain big sagebrush (-13% change)
- population changes 5,850, 5,860, and 3,940 plants/acre for Wyoming big sagebrush (-33% change)

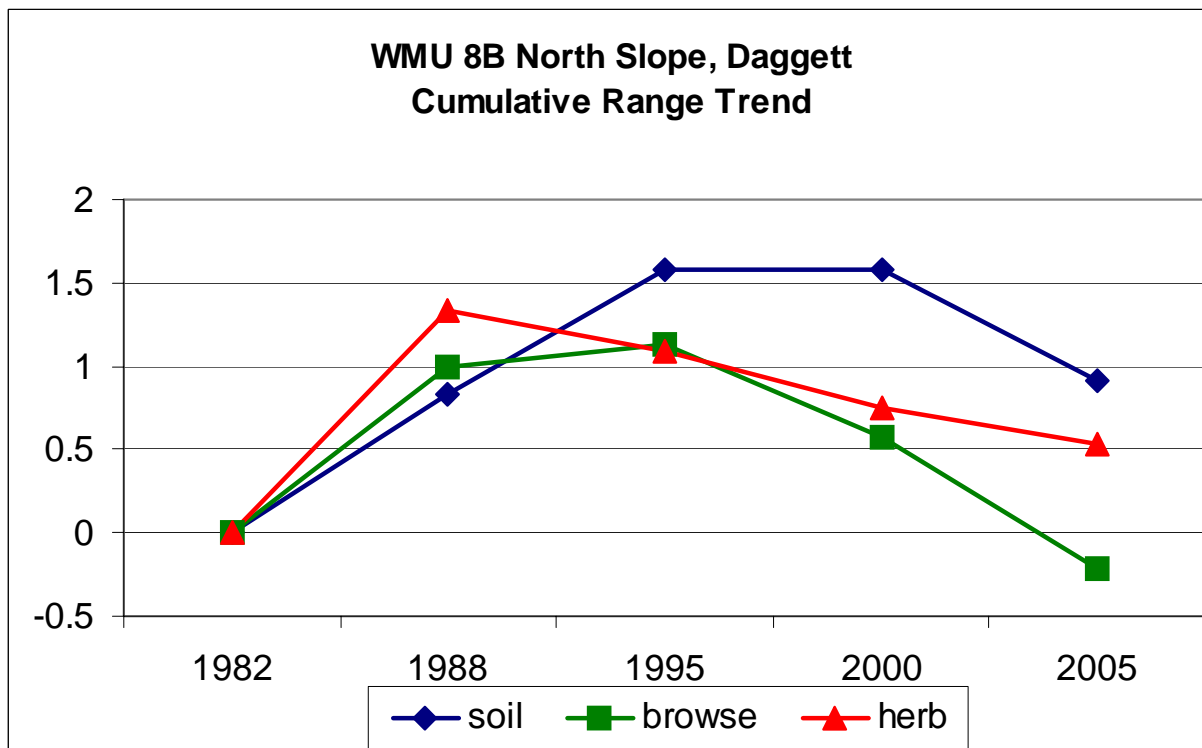
The perennial forb understories associated with mountain big sagebrush and Wyoming big sagebrush have similar downward trends, but upward trends for perennial grasses with regard to the site potentials of the two sagebrush subspecies communities. The following values show percent change in nested frequency values for perennial grasses and forbs for both sagebrush communities from 1995 and 2005.

- percent change for perennial grasses...+8% for mountain big sagebrush
- percent change for perennial grasses...+4% for Wyoming big sagebrush
- percent change for perennial forbs.....-15% for mountain big sagebrush
- percent change for perennial forbs.....-47% for Wyoming big sagebrush

Pellet group data estimated an overall increase in wildlife use on the sites in 2005. Elk pellet numbers increased on 3 sites, decreased on 2 (Greendale and Antelope Flat), remained the same on 3, and was not sampled on one site (Goslin Mtn). Deer pellet numbers increased on 6 sites, remained unchanged on 1, and decreased on 2 (Death Valley and Clay Basin Bench). Antelope pellets were not differentiated from deer pellets, but were suspected to be on the Goslin Mtn, Bear Top Mountain, Death Valley, Antelope Flat, West Goslin, and Clay Basin Bench sites. Moose pellets were sampled for the first time on the Death Valley site (8B-6). Sagegrouse pellets were sampled for the first time on Bear Top Mountain, Antelope Flat, and West Goslin.

Cumulative Range Trends—WMU 8B North Slope, Daggett

	1982	1988	1995	2000	2005
soil	0	0.5	1.0	0.9	0.5
browse	0	0.7	0.4	0.0	-0.7
herb	0	1.2	0.7	0.3	0.1



TREND SUMMARY

	Category	1982	1988	1995	2000	2005
8B-1 Cedar Springs	soil	est	0	+1	NR	NR
	browse	est	-2	-2	NR	NR
	herbaceous understory	est	-1	0	NR	NR
8B-2 Goslin Mountain	soil	est	0	+1	+1	0
	browse	est	0	-1	0	-1
	herbaceous understory	est	+1	0	+1	0
8B-3 Bear Top Mountain	soil	est	0	0	-2	+2
	browse	est	+2	0	-2	-1
	herbaceous understory	est	+2	-2	0	-1
8B-4 Greendale	soil	est	+1	+1	0	-1
	browse	est	+2	0	0	0
	herbaceous understory	est	+2	+2	-2	+1
8B-5 Bennett Ranch	soil	est	+1	0	0	0
	browse	est	+2	+1	-1	0
	herbaceous understory	est	+1	-1	0	0
8B-6 Death Valley	soil	est	+1	0	0	0
	browse	est	0	0	-1	0
	herbaceous understory	est	+2	0	+1	0
8B-7 Antelope Flat	soil		est	+1	0	-1
	browse		est	0	0	-1
	herbaceous understory		est	-1	0	0
8B-8 Phil Pico Mountain	soil		est	0	0	-1
	browse		est	0	0	+1
	herbaceous understory		est	-2	0	-1
8B-9 West Goslin	soil			est	0	-2
	browse			est	0	-2
	herbaceous understory			est	-2	-2

(-2) = down, (-1) = slightly down, (0) = stable, (+1) = slightly up, (+2) = up
 est = site established, NA = data not available, NR = site not read

	Category	1982	1988	1995	2000	2005
8B-10 Sagebrush Ridge	soil			est	0	NR
	browse			est	0	NR
	herbaceous understory			est	-1	NR
8B-11 Triangle Meadow	soil			est	0	NR
	browse			est	NA	NR
	herbaceous understory			est	0	NR
8B-12 Big Meadow	soil			est	0	NR
	browse			est	NA	NR
	herbaceous understory			est	-1	NR
8B-13 Lower Big Meadow	soil			est	0	NR
	browse			est	NA	NR
	herbaceous understory			est	-1	NR
8B-14 Clay Basin Bench	soil				est	-1
	browse				est	-2
	herbaceous understory				est	+2

	Category	1982	1988	1995	2000
Average Range Trend	soil	0.5	0.5	-0.1	-0.4
	browse	0.7	-0.3	-0.4	-0.7
	herbaceous understory	1.2	-0.5	-0.4	-0.1
Total Number of Sites Read		6	8	13	13
				13	9

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 est = site established, NA = data not available, NR = site not read

Precipitation graphs for the North Slope Summit and Daggett unit. Data is percent of normal precipitation averaged for weather stations at Manila, Flaming Gorge, Allen Ranch, and Mountain View, WY (Utah Climate Summaries 2005).

